

WHAT IS CLAIMED IS:

1. A separating arm holding mechanism for use in a sheet feeder by which paper sheets are separated with a claw pressure exerted upon a top face of an uppermost sheet of paper by means of a corner pawl formed at one end of a plate-shaped separating arm, where the separating arm is supported swingably and substantially parallel to a plate-shaped attachment plate, the separating arm holding mechanism comprising:

10 a central swing-center support portion, an anterior swing guide portion, and a posterior swing guide portion, wherein

the central swing-center support portion includes a swing center portion in which a plate axis extending from the attachment plate is inserted into a hole provided at an upper center portion of the separating arm, and a lateral movement arresting portion provided on the plate axis to regulate movement of the separating arm in a direction perpendicular to a thicknesswise direction of the separating arm,

20 the anterior swing guide portion includes a first partial sliding contact portion for guiding a swing direction of the separating arm by an opening portion of a slit with expanded recess that is provided at a front

portion of the attachment plate forward of the central swing-center support portion, and

the posterior sliding guide portion includes a second partial sliding contact portion for guiding a swing direction of the separating arm by protrusions in contact with both sides of the separating arm provided on a lower rear side of the central swing-center support portion.

2. The separating arm holding mechanism as defined in Claim 1, wherein the swing center portion comprises: a plate axis extending at right angles in a constant width from a part of the attachment plate; a hole having a diameter smaller than the width of the plate axis and formed on an upper central portion of the separating arm; and an insertion slit formed extending in an oblique direction onward from a periphery of the hole so that a portion of the plate axis larger in width than the diameter of the hole is fit along a thicknesswise direction of the separating arm, and wherein the lateral movement arresting portion is an arresting slit that is provided on one side of the plate axis so that a portion in a periphery of the hole other than a portion at which the insertion slit is formed is fit along a swing direction of the separating arm.

3. The separating arm holding mechanism as defined in Claim 1, wherein the swing-center portion comprises: a

swing support plate extending at right angles in a constant width from a part of the attachment plate; a fan-shaped hole that includes a partial circular arc whose radius is smaller than a width of the sliding support plate and that is formed on an upper side of a central portion of the separating arm with a head portion positioned on an upside; and an insertion slit formed so as to extend in an oblique direction onward from a periphery of the partial circular arc of the fan-shaped hole so that a portion of the sliding support plate larger in width than a radius of the fan-shaped hole is fit along a thicknesswise direction of the separating arm, and wherein the lateral movement arresting portion is an arresting slit that is formed at a lower end of the sliding support plate in an opened state so that a portion in a periphery of the partial circular arc of the fan-shaped hole other than a portion at which the insertion slit is formed is fit along a sliding direction of the separating arm.

4. The separating arm holding mechanism as defined in Claim 1, wherein the swing center portion comprises: a swing support plate extending at right angles in a constant width from a part of the attachment plate; a fan-shaped hole that includes a partial circular arc whose radius is smaller than a width of the sliding support plate and that is formed on an upper side of a central portion of the

separating arm with a head portion positioned on an upside;  
and an insertion slit formed so as to extend in an oblique  
direction onward from a periphery of the partial circular  
arc of the fan-shaped hole so that a portion of the sliding  
5 support plate larger in width than a radius of the fan-  
shaped hole is fit along a thicknesswise direction of the  
separating arm, and wherein the lateral movement arresting  
portion is an arresting slit that is formed at an upper end  
of the sliding support plate in an opened state so that the  
10 head portion of the fan-shaped hole is fit along a  
direction in which the insertion slit is formed.

5. The separating arm holding mechanism as defined  
in Claim 1, wherein the swing center portion of the central  
swing-center support portion is positioned so that a  
15 tangent line of a track of the corner pawl drawn by swing  
of the separating arm in the state that the separating arm  
is in an uppermost position in a swing range of the  
separating arm is substantially coincident with a plumb  
line, and the posterior swing guide portion is formed in a  
20 position facing a vicinity of a rear lower end of the  
separating arm.